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## Antidepressant Use Amongst College Students: Findings of a Phenomenological Study

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**Keywords:** antidepressants; college students; qualitative research; phenomenology; autonomy

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### Abstract

**Background:** Depression among college students is an escalating problem and could have serious consequences such as suicide. There has been an increase in use of antidepressants on college campuses in United States. However, an in depth understanding of this phenomenon from the college student's perspective is lacking in the literature. **Objective:** This study examined college students' experiences and treatment decision making during their depression treatment. **Methods:** A longitudinal, phenomenological research methodology was completed. The participants were nine students who were taking antidepressants for diagnosis of depression. Recruitment was done via brochures placed at University bulletin boards, and a mental health clinic. Three audio taped, unstructured interviews were conducted with each participant over four months. The central question asked was: What has the experience of treating depression been for you? Analysis of text was done using Van Manen's lifeworld existentials of lived body, lived time, lived relation and lived space as the organizing framework. **Results:** Thirteen themes were identified within the four lifeworlds. The results showed that lived relation with providers was important for college students' decision to both initiate and continue antidepressant use. Students' role was defined in conjunction with provider's role by them as wanting to be a 'player' in their treatment decisions and needing to be 'acknowledged' as such by their providers. **Conclusions:** Overall, the underlying essential theme of 'autonomy' was portrayed by the students' experiential accounts of their depression treatment and treatment decision making.

### Introduction

Between 1988 and 2003, the likelihood of a college student suffering from depression doubled and suicidal ideation tripled.<sup>1</sup> Anti-depressant use by all Americans has increased by almost 400 percent between 1988 and 2008 and correspondingly, the use of antidepressants on college campuses in United States and the utilization of campus counseling centers increased as well.<sup>2-5</sup> According to the Fall 2009 American College Health Association, National College Health Assessment,<sup>6</sup> college students reported experiencing the following in the last 12 months:

- Felt overwhelmed by all you had to do (85%)
- Felt exhausted (not from physical activity) (80%)
- Felt very sad (60%)
- Felt very lonely (56%)
- Felt overwhelming anxiety (47%)
- Felt things were hopeless (46%)
- Felt overwhelming anger (37%)
- Felt so **depressed** that it was difficult to function (30%)
- Diagnosed or treated by a professional for **depression** (9%)
- Seriously considered suicide (6%)
- Intentionally cut, burned, bruised, or otherwise injured yourself (5%)
- Attempted suicide (1%)

Depression among college students is an escalating problem and has now surpassed substance abuse and alcohol use as a cause for concern on college campuses.<sup>1</sup> This is a problem not only for college students themselves, but their families, friends, as well as college administrators, to take note of and to stop the problem from growing further. In the National Comorbidity Survey Replication study by Kessler et al.,<sup>7</sup> life time prevalence of major depressive disorder was found to be 16.6% which was higher than alcohol abuse and substance abuse disorder and second only to the entire class of anxiety disorders. The World Health Organization has categorized depression as among the most disabling disorders in the world, estimated to affect nearly 340 million people worldwide.<sup>8</sup>

The purpose of this paper was to gain insights from college students' perspectives to help develop better depression treatment and as a result better caring of depressed students' needs. Secondly, this specific group of patients has not been studied extensively with respect to their depression medication treatment experiences. Using phenomenological inquiry, this study investigated college students' experiences of depression medication treatment within the decision making context as described by the study respondents. This information would be useful for clinicians to help them be better informed regarding this particular group of patients'

perspectives and experiences and hence individualize care and treatment of depression.

### Study Context and Literature Review

Overall, there is so much variation in the treatment of depression and its problems, that it cannot be completely understood at the system level. Hence there is a need to examine a certain population at the *patient* level to obtain a deeper “understanding” and uncover issues related to this problem. To be able to study in depth and understand one ‘slice’ of this wide-ranging problem, we decided to focus on a specific group of patients, that is, ‘college students that received antidepressant medication treatment for depression’. While some studies have been conducted to examine patients’ experience of depression<sup>9,10</sup> relatively few studies have specifically examined medication taking or the overall treatment experience of patients being treated for depression. A brief overview of literature we found is presented next.

Knudsen<sup>11</sup> examined SSRI (selective serotonin reuptake inhibitor) use among younger women in Denmark using the grounded theory method. The author reported that self concept of the women in the study changed during their career as antidepressant users wherein they evaluated themselves from what they believed was the perspective of the society and their concept of self was closely related to how they functioned in their everyday life.

Another qualitative study that examined patient’s views and experiences of taking antidepressants found that patients initially were ambivalent about taking antidepressants, but that their attitudes towards antidepressants changed over time in response to experience of treatment.<sup>12</sup> The sample for this study ranged in age from 18-69 years and not all of the study participants were taking antidepressants. The authors mentioned that there was a wide range of responses to antidepressant medications which might be attributed to the large variation in type of study participants.

Karp<sup>13</sup> explored the symbolic meanings attached to taking antidepressant medications via in-depth interviews of a wide range of persons, using the grounded theory method. The study participants varied considerably in age, race and occupation providing a broader perspective on antidepressant use. The results of his study showed that an individual’s changing response to psychiatric medications can be described as a socialization process, the four stages of which were described as resistance, trial commitment, conversion and disenchantment. The study extended the literature on patients’ perspectives of psychiatric drug use by examining a specific class of drugs – tri-cyclic antidepressants.

Other approaches, such as claims data analysis<sup>14</sup> and self-administered surveys<sup>15,16</sup> have been used for identifying drug related, disease related, and patient related demographic factors associated with aspects of depression treatment, particularly medication discontinuation. To understand medication discontinuation more deeply, Wang et al.<sup>16</sup> reported findings from a focused approach in which they utilized a survey instrument to understand the initiation and continuation of treatment with regards to mentally ill patients. However, their study did not specifically study depressed patients.

In addition, some studies examined several aspects of treatment decision making for depressed patients and how patient-provider interaction or the patient-provider relationship affected outcomes of depression care.<sup>17,18,19</sup> For these, however, we found no study that had a specific focus on college students.

Our study built upon existing research in the area of depression treatment by providing in depth information on college students’ experience of treatment of depression and their treatment decision making, described in combination with the college students’ narrative of their antidepressant medication experience. The objective of this study was to describe college students’ experiences as they underwent treatment for depression. The specific aims of the study were to examine:

1. the decision-making processes involved in depression treatment, as described by the respondents.
2. respondents’ view of their role in their treatment decisions.
3. respondents’ view of their provider’s role in their treatment decisions.

### Methods

Phenomenology (the study of lived experience) was the specific research methodology used for this study. Study participants were college students taking antidepressants for diagnosis of depression. Since this was a **longitudinal study** requiring two follow ups over time, the sample size of up to ten participants was decided as optimal for this study to allow for loss to follow up.<sup>20</sup> Only one student was lost to follow up. Recruitment was done via flyers and brochures placed at University bulletin boards, and mental health clinic. Contact information for the researcher was provided on the brochures for interested persons to call and decide on convenient interview times and location. In this study, all nine participants voluntarily met at the researcher’s office for the interview process. Participant selection was based on the following inclusion and exclusion criteria:

**Inclusion Criteria:**

- Adults (18 years and above) enrolled at the University of Minnesota
- Diagnosed with depression
- Taking current antidepressant for 6-12 weeks
- Self-administer antidepressant medication
- Willing to participate as indicated by signed informed consent

**Exclusion Criteria:**

- Non-English speaking
- Taking antidepressants for conditions other than depression
- Hospitalized patients

Before the main study, a pilot interview along with one follow up was conducted with a college student who was taking medication for treatment of depression. This was done as a *method* pilot that helped the researcher gain knowledge about the research area as well as become familiar with the interview situation and to come up with appropriate probes or follow up questions to ask of interviewees during the main study. One main outcome of this was the researcher's decision to *not* use member checking (the restating of information and asking the participant to comment on its accuracy) for the main study since the interviewee admitted to being upset when all her treatment experience was presented to her as a whole. This could have served as a reminder of some of her unfortunate experiences. The other usefulness of doing a method pilot was in refining some of the probe questions based on the pilot interviews. For the main study, in order to capture the narrative, the students were asked to reflect on their experience and relate their experience in the format of a story.<sup>21</sup> To help the participants prepare for the interview they were given a few examples of questions to think about (e.g. what happened in your first encounter with the physician?).

Approval for this study was obtained from the University's Institutional Review Board. An informed consent form for the study was reviewed and signed by each participant before the first interview. Three audio taped, unstructured interviews over a period of four months were conducted with each participant. First interview was conducted **at 6-12 weeks of current treatment**, second interview was done **at six weeks after the first interview** and last interview was done **at four months (16 weeks) after first interview**. The central question asked of the participants was: Tell me, what has the experience of treating depression been for you? Probes or follow up questions were used selectively.<sup>22</sup> Field notes also were recorded. Participants were asked information on demographic, medication history and contact information.

They were given a total of \$70 in University Bookstore gift certificates in return for their participation in three interviews.

The audio taped interviews were transcribed verbatim. The text of all transcripts was coded using the thematic format described by Van Manen.<sup>23</sup> Three coding approaches used to uncover the thematic aspects of the phenomenological text were (1) holistic, (2) selective and (3) detailed (line by line) approaches.<sup>23</sup>

For the resultant coded text, the following two-phased analysis approach was used:

### **Phase I - Organizing & Reflecting on Text Using Lifeworld Existentials**

In this phase of analysis, Van Manen's Lifeworld Existentials-lived space, lived body, lived time, and lived relation were used to guide reflection on the study text. These are themes that pervade the life world of every human being regardless of their historical, cultural or social connectedness although not in the same modality for every person. The Lifeworld Existentials<sup>23</sup> are briefly described below:

**Lived Space** is felt space and referred to as the landscape in which humans move or find themselves at home. How a body inhabits a space affects the way that persons feel about themselves, for example, vulnerable in a strange place and comforted in a familiar place.

**Lived Body (corporeality)** describes the body not merely as an object in the world but rather one's being-in-the-world by which one perceives, values and judges.

**Lived Time (temporality)** describes one's temporal way of being-in-the-world. It refers to subjective time as opposed to clock time. The temporal dimensions of past, present and future constitute the horizons of a person's landscape.

**Lived Relation (relationality)** denotes the relationships humans maintain with others in the interpersonal space they share with them.

### **Phase II - Deriving the Essential Theme Using Imaginative Variation**

This phase of analysis involved isolating and differentiating those themes that were essential to the experience of depression treatment from themes that were incidental. The essence of the experience is derived through the process of question posing and reflecting on the text and writing and rewriting about the common experience that emerges from the four lifeworld domains. The Essential Theme was

determined by use of **free imaginative variation technique**.<sup>23</sup> This technique used to derive the essential theme was determined by asking the following questions of the text: *Does this phenomenon remain the same if we imaginatively change or delete this theme from the phenomenon? Does the phenomenon without this theme lose its fundamental meaning?*

The researcher reflected on the individual responses of the participants, the whole of each participant's experience, and similarities and differences between participants, in order to arrive at themes that most appropriately and accurately characterized the phenomenon under study. The researcher also conducted "hermeneutic conversations" with experts in qualitative methods. During these conversations, themes' orientation to the phenomenon and the fit of the themes with the text was verified.

### Considerations of Rigor

The treatment experience in this study was obtained as lived by the college students and not as either by the researcher or anyone else. To help evaluate the rigor with which the study was conducted, the criteria of Credibility, Fittingness and Auditability<sup>24</sup> were employed at every stage of the study. These criteria for rigor are described next.

**Credibility** (similar to internal validity in quantitative research) measures how vivid and faithful are the descriptions of the phenomenon. In this study, the two primary ways that credibility was achieved was that first, the analysis procedures were reviewed in detail by one of the co-authors (CPM) who is a qualitative research expert, in order to prevent researcher bias and selective inattention and secondly, by the primary researcher (RLS) providing rich excerpts from the transcripts in the results.

**Fittingness** (similar to external validity in quantitative research) measures how well the working hypothesis or proposition fit into a context other than the one from which it was generated. This is done by comparing and contrasting the findings of this study to what is already known about this topic.

**Auditability** (similar to reliability in quantitative research) refers to the ability of another investigator to follow the decision or audit trail. Journaling allowed the investigators and readers to retrace the trail of the analysis.<sup>25</sup>

### Results

The results of the study are described in terms of 1) descriptive information; 2) themes identified using the lifeworld existential; and 3) the Essential Theme. Descriptive

information about the study participants is given in Appendix I.

Regarding Lifeworld Existentials<sup>23</sup>, thirteen themes emerged. Of these, four related to lived body, four to lived time, three to lived relation, and two to lived space. Each of the 13 themes is summarized in Appendix II. Appendix III contains text examples of each lifeworld and a summary of each lifeworld is given next.

**Lived Body:** The students described their role in their treatment decision making as that of a 'player'. They described different bodily effects of the antidepressants at initiation, continuation and at discontinuation. Also, students were quite proactive in helping treat their depression using other non-drug steps in order to improve their emotional and physical well being.

**Lived Time:** Students chose to take antidepressants over seeking counseling or therapy since they perceived a 'lack of time.' Students did not foresee discontinuing their antidepressants until the time that they were not stressed by school and other life's demands, as stated by one of the students "Till I feel my life isn't it as chaotic". Overall, they did not have much trouble adhering to their daily medication regimen. Over time most students developed 'patience' for waiting for the effect of the antidepressant that they were taking.

**Lived Relation:** The students' described their provider as someone who would 'acknowledge them' and 'involve them' in their treatment decision making. The students in this study perceived psychologists to be helpful only in case of a precipitating event, if at all. Other lived relations that the students had with their family members, partners and their friends were described as being helpful in their depression treatment. Both were described as being 'supportive' but not playing a major role in the treatment decision making of these students.

**Lived Space:** The students proactively created a 'new lived space' during their treatment of depression to reduce the stigma associated with it. Also, students perceived a 'change in their existing space' wherein one change was feeling less isolated as a result of knowing that there were others who felt like them.

### The Essential Theme - Autonomy driving college students' depression treatment

On examining the lifeworld themes of the students' narratives using further reflection, analysis and writing and rewriting, the essential theme was revealed. 'Autonomy' was



found to be the essential theme since it was evident in each lifeworld of the students. A text example for the Essential Theme is given in Appendix IV. The underlying essential theme of 'autonomy' was portrayed by the study participants' experiential accounts of their depression treatment and when they described their role in treatment decision making.

Autonomy was seen through the 'relations' they had with their family, friends and health care providers. Also, evident in how they referred to their 'body' or 'being-in-the-world' and how their perception of such autonomy changed over 'time'. Regarding lived 'space', the students strove for autonomy by making efforts to change their immediate lived environment through 'being there' for depressed others who were in need of help and by avoiding situations that were 'detrimental to their depression treatment'. In this study, students described using different examples that they would want to be a 'player' in not only their depression treatment but any health problems that they may have since it was "their body and their health care." Such cases made it more plausible to consider 'autonomy' as a theme specific to college students' treatment decision making or at least specific to this younger age group of 18 to 30 years since depression treatment did not remain the only commonality.

It should be noted that autonomy as described by the students in this study was not completely divorced from the provider's role in their treatment decisions. In fact, when the autonomy of some students was acknowledged by their providers, it led to the students continuing their antidepressant medication. If their autonomy was ignored by the providers it more often than not led to antidepressant discontinuation. So it might be argued that it is this 'disconnect' in the patients' and providers' perception of presence of autonomy that is the factor affecting the treatment outcomes.

### Difficulties and Limitations

Study participants may have felt uncomfortable to discuss their experiences on tape. We allowed for ample time before the interview to discuss any such issues with the interviewee, as well as to facilitate the establishing of a relationship between the interviewer and interviewee. The time intervals between interviews were deemed short enough to reduce any serious memory recall issues. However this may have been still problematic for some respondents. This study used a small sample of depressed college students from one campus in a Midwestern university in United States, therefore the findings of this study should be regarded as specific to this sample until confirmed by research in other demographic or geographic settings.

### Discussion

Overall, this study described the phenomenon of depression treatment with respect to college students. The focus was on describing the antidepressant use and treatment decision making of this group of patients to allow tailored care. Hence this study gave voice to college students' depression treatment experiences. The different stages that the students go through in their depression treatment were described in this study and can be potentially intervened upon to better the antidepressant use process.

Patient's role was defined in conjunction with provider's role by the college students in this study as students wanting to be a 'player' in their treatment decisions and needing to be 'acknowledged' as such by their providers. It is significant that the sense of autonomy was underlying college students' decisions regarding their depression treatment. Related to this essential theme of 'autonomy', are the findings of the study by Knudsen et. al.<sup>11</sup> who found that the young group of Danish women in their study changed in their self concept over their career as SSRI users from being 'distressed and needing help' to having 'problems discontinuing their medication.' While in the present study, it was found that the college students for the most part were not against taking medication and also they did not feel too much conflict regarding continuing antidepressant treatment. In fact, most of the patients in this study had no problems in staying on the medication for extended periods of time.

This finding is also different from the study by Gammel & Stoppard<sup>26</sup> where they found that 'younger' women in Canada were against taking medication and wanted to cope on their own as opposed to 'older' women. However, there may be a qualifier here where some respondents in the present study, while explicating benefits of taking medication, acknowledged the use of behavioral modification as a *long term* solution to their depression.

Regarding other findings from this study, it was interesting to note that unlike other studies examining experience of treatment of depression<sup>11,26</sup> patients in this study did not subscribe to the biological model of depression as the *only* explanation of the disease even though they were taking medications to treat their depression. This could be attributed to an increased general awareness of other options that help in treating depression. Another factor could be that nowadays, the treatment of depression with medication doesn't need to be justified by patients having to change their beliefs about depression. Such 'cognitive dissonance' might have been reduced or eliminated by the commonness of treating depression with medication in the present society, at least in the United States.

Also, unlike the study by Goldstein & Rosselli<sup>27</sup> some students in this study seemed to endorse *both* the biological model of etiology of their depression and the psychological model. This seemed to be the case especially in students who had more experience with taking antidepressants. These students could definitely say that they believed that the medication was helping with the biological aspect of their depression but that they would not only seek psychotherapy but also change their life's situations for obtaining long term cure for the psychological aspect of their depression.

### Autonomy among Depressed College Students

Overall, students showed complete autonomy regarding their relations with family and friends. This could be attributed to the developmental stage of the young students where they are most likely asserting their autonomy in every aspect of their lives and not just their depression treatment. The finding of autonomy does suggest that the provider might no longer need 'to make an effort to involve patients (especially students)' in their treatment decisions as may have been the case even a few years ago, for instance as described by Chewning & Sleath<sup>28</sup> in their discussion of the client-centered model. The role of the patient as being autonomous is becoming clearer. Now, the role of the provider might need to be redefined as one not encouraging patients but acknowledging this autonomy and working with it towards the goal of optimal outcomes. Considering this finding of autonomy in the context of the patient- provider relationship, the next section provides a discussion of the patient- provider interaction that was described in this study.

### Patient – Provider Interaction in Depression Treatment

Similar to findings reported by Bultman & Svarstad<sup>17</sup> our findings showed that provider communication and interaction played a significant role in patients' decision regarding the continuing of their medication. Some providers informed these students that it was common for other students in a similar situation as them to stay on antidepressants for longer periods. Such information from the provider made the students 'ok' with continuing medication treatment. There may also be a placebo effect in play here since a placebo effect has everything to do with the expectation of benefit. So there is a need for providers to make patients comfortable with talking to them first and then explaining clearly what are the expectations of the benefits of the treatment that they are offering their patients.

Patients' view of their role as a 'player' in their decisions, which increased over time, reveals an important aspect for providers to keep in mind since accordingly they would need to tailor their communication style to provide effective

patient care. It is imperative to realize that for these college students there is a need to be involved in their treatment decisions and not be treated as people who don't know what to do and what they want. The need for being acknowledged is important for depressed patients; arguably more than any other patients.

On the other hand, by the college students defining their role in their treatment decisions through autonomy, it may be that the role of their health care provider need not be made explicit. It could be suggested that there is no role other than to help, facilitate these 'autonomous but depressed' patients through their journey of treatment decision making. This issue of patient and provider roles in depression treatment decisions will be further discussed under study implications.

### Suggestions for Future Research

This study, by describing the medication use process for depressed college students contributed to the understanding of antidepressant medication use. The patient's [college student's] view was presented in this study as a beginning point for understanding depression treatment experience and decision making. The next step would be to describe providers' views and experiences regarding treating depression. It would be useful to consider the different effects on patients described in this study to tailor care at the different stages of antidepressant use.

Cultural aspects of treatment would also be interesting and important to study. This study 'scratched the surface of it', by including only one person's experience of cross cultural differences in receiving and accepting care for depression. Specifically, there may be differences in aspects of the 'autonomy' uncovered in this study across different cultures. Also, information from this study would be useful to create patient rated outcome measures for depression treatment evaluation since patients are the best resource for knowing if the treatment is working.

### Study Implications

The implications of this study will be discussed under four different levels of implications beginning with the discussion of 'patient- provider interface', and then discussing implications for 'pharmacy', then implications for the 'health care system and college systems' is described followed by the broader 'societal implications' of this study.

### Implications for the Patient - Provider Interface

It seems unfortunate that with all the options available today with pharmacological treatment, patients have to still go through the game of try this, now that and let's see what works! Since patients in this study were self selected, such

that they could be more likely to adhere to their treatment, this study uncovered more provider or system related issues with depression treatment. All patients in this study wanted to stay on the medication they were on since they did not want to go through the process of starting depression treatment again, trying to choose the right drug and so on. However, they still had to go through a trial and error process before something worked for them.

It would be logical to tailor medication information based on patient preferences. Especially since patients, like the students in this study would be likely to eventually tailor their medication to their bodily experience anyways. The effect of medication on emotions was also something that was seen as important for students in this study and it needs to be addressed by physicians since patients do react differently to the same effect depending on their priorities.

As discussed earlier, the autonomy theme was interesting in that it provided a way for patients to probably not replace the provider but to have a collaborative relation and discussion with their provider regarding their treatment. Most of these patients wanted to be able to discuss treatment issues with their providers and some even came prepared with information from the internet and other sources to do so. However, almost all of the patients had not seen such a sentiment reciprocated by their providers.

Some issues that were uncovered in this study that could potentially be addressed by physicians are related to the temporal aspect of patient medication taking and treatment decision making. Decision making role of some students in this study changed over time from wanting a remedy in their first visit to wanting to be a player in their treatment decisions in later visits. And patients' need to be involved was evident as soon as they felt better after taking the antidepressant medication. While there were other patients who had both the 'need for acknowledgement' and 'need to be a player' right from the beginning of their treatment process for depression. This finding reiterates the findings of the study by Wills & Holmes- Rovner<sup>29</sup> where the authors when validating a decision scale in depressed patients found that decision satisfaction was associated with involvement in health related decisions.

Another factor that made patients 'ok' with initiating and continuing antidepressants was that they had been told by their physicians that it was common to do so. Physicians discussing other patients in similar situations made patients feel at ease about their depression treatment. This sort of information can be easily incorporated even in a short patient visit. Overall, it is definitely important to balance and even

start from the patient's need for autonomy while providing expert advice at least in the case of college students' depression treatment decision making.

### Implications for Pharmacy

This study contributed to the understanding of antidepressant medication use in college students. Also, some implications specific to pharmacy practice were uncovered in this study. The most important one being that college students by virtue of their young age are 'naïve' to pharmacy since they may not be taking many prescription medications. Awareness needs to be created for students as to the availability of pharmacists as a resource in their health care. Being consistent with the idea of autonomy uncovered in this study, ultimately the patient will take the first step in seeking pharmacists for his or her medication related needs.

### Implications for Health Care System and College Systems

Another finding that may be specific to college students and hence could be intervened upon was their unwillingness or inability to schedule counseling or therapy sessions. The reasons provided were varied the most common being 'lack of time'. Also some of the other reasons were that these students did not like to be 'put on the spot' or did not see the usefulness of discussing their lives with psychologists.

One option for college administrators would be to 'convince' students and allow them time in their schedules in some way to address their mental health and education through session(s) with psychologists. In fact, such mandatory sessions for all students may not be such a bad idea to enable college administrators to reduce the stigma of the process too! The second simpler solution would be to accept that students at the stage of their student career do not have time for therapy, and hence to further publicize availability of the antidepressant medication alternative to depression treatment.

Regarding implications for the health care system overall, it is important to reduce barriers to mental health care as much as possible. The presidential commission report<sup>30</sup> on mental health called for a series of changes in the way mental illness is diagnosed and treated, where it was estimated that about \$71 billion of the nation's \$1 trillion annual health care spending went for mental illness spending. The interesting distinction as pointed out by Michael Hogan, the chairman of the commission was that, "mental health is the only category where we spend more money not to treat it than to treat it", referring to the money spent on disability claims due to this problem.



Earlier to the commission report, was the Institute of Medicine (IOM) report on 'quality chasm'<sup>31</sup> wherein clearly systematic issues of 'waste' were described as a reason for increased costs. The report called for a "reduction of such waste and increase of efficiency through change in the microsystems of care where the 'quality' experienced by the patient is made or lost." This report also called for moving from "professional autonomy to care customized according to the patients' needs and values".

In the present study too, patient 'autonomy' was the essential theme for college students' experience of depression treatment and decision making. Being prescribed a number of antidepressants without any attempt at 'customization' led to not only 'waste', but also the patients' dissatisfaction, distrust and eventually discontinuation of treatment. It does seem that today, there is definitely a need to reinforce and if needed enforce again the suggestions of the 2002 IOM report to be able to provide quality care. The next section goes on to describe the broader societal implications of the study findings.

### Societal Implications

By examining the sociological aspect of depression and its treatment in addition to the psychological aspect one could get a more complete picture of the issue at hand. As discussed earlier, the students in this study did not have too many issues with the idea of taking antidepressants and most were 'ok' with taking them over a long period of time. This perception was different from other similar studies conducted in Denmark and Canada. Such differences could be possibly attributed to cultural differences in that the United States society and its perception of antidepressant use may be very different than that in Denmark or any other European country.

In his book, 'Better than Well', author Carl Elliott<sup>32</sup> discusses the American obsession with enhancement technologies, saying that an antidepressant such as Prozac® is one such means that helps improve 'self' and hence despite the fear of medicalization has become commonplace in this society. The students' comments in this study might be reflective of this societal perspective. There are some sociological issues inherent to the student population. For instance, when the students discussed their relations with their family, it was interesting to note that this ranged widely from the family being extremely supportive of their treatment to not even knowing about it.

The family being supportive of treatment may not necessarily be a good thing since there may be some persons who might not be clinically depressed so as to need treatment. However,

if the normal human experience of feeling down, anxious or lonely at times is 'medicalized' in this society it may be easier to follow that route for both parents and students. There has been enough discussion on this topic and books<sup>31,33</sup> have been written on such issues not only with regards to depression treatment but also other similar issues such as treating children for hyperactivity or treating anxiety in the earlier days. The medicalization of normal human experience at the same time trivializing medication use has been associated with persons minimizing their responsibilities to take care of themselves. However, in this study, medication seemed to act as a first 'step' that the students had to take before moving on to even thinking of taking care of themselves through other means.

Speculating further on this, the breakdown of family structure and maybe even the culture of 'consumerism' added to the existing 'individualism' in today's society, especially in the United States, might be some reasons why more and more college students or even adolescents or younger children are falling prey to such 'dis-eases' as depression. The other side of the issue is that general perception in the society that people are being unnecessarily medicated maybe a barrier to seeking care for those depressed persons who really need help and cannot function without it.

Some students in this study felt that the antidepressant advertisements on television portrayed an 'easy and quick solution', which was misleading. Showing that depression is common may be good for reducing any societal stigma associated with having the disease. However it brings up the issue that patients may not be taken seriously precisely because the disease is so prevalent. In the end, although as researchers, we pick one aspect of a problem such as depression to study, it is necessary to keep in mind the bigger picture and its sociological impact. In the meantime, we can continue working towards improving the treatment of depression to at least take care of the present concern as best as we can. To conclude, we reiterate that 'autonomy' should be considered as a useful tool when focusing not only on depression treatment but the entire health care decision making for college students to provide them *individualized* and hence *effective* care.

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## Appendix I: Descriptive Information for Study Participants

- Eight females, one male.
- Age: 18-30 years, 7 of 9 were 25 years and below.
- Diagnosis: Mild-severe depression, 5 of 9 had major or severe depression.
- Length of illness: 6 weeks - 8 years, 5 of 9 had depression for 5 or more years.
- Common co-morbidity: Anxiety
- 4 of 9 were prescribed Effexor®.
- 7 of 9 patients had been prescribed by a primary care physician.
- All respondents had health insurance at beginning of study.

## Appendix II: Summary of Lifeworld Existentials Themes

Lived Body	Lived Time	Lived Relation	Lived Space
Antidepressant Use Trajectory: Different Effects at Initiation, Continuation and Discontinuation	Developing Patience for Evaluating Antidepressants	Patient View of Provider Role in Treatment Decisions: Physician and Psychologist Relations	Creating a New Space: Being Open about having Depression
Patient Role: A Player in Treatment Decisions	Planning on Taking Antidepressants till No Stressors.	Role of Friends and Family: Supportive but Not a Part of Decision Making	Perceived Change in Existing Space: Everything is Really Normal
Non Drug Steps to Reduce Depression Symptomology	Looking for a 'Quick Fix'	Role of Others: Communal Relations	
Influence of Antidepressants: Isolated and Verbalized	Taking Medications Everyday is Easy		

**Appendix III: Text Examples of Lifeworld Existentials**Text Example of Lived Body:*On usefulness of antidepressant medication:*

"Hmm, hmm. That's what [Effexor®] kind of made me seek out other people and find more friends and people to confide in so...ahm ya, but even knowing that I have more people to confide in and I have more friends that are accessible to me....that makes me feel better on it's own. So it's not completely the medication that did that.....it's kind of the medication helped me to do that...helped me to gain the self esteem and the confidence to meet more people. But because I did meet more people..... it's helped me in confidence in ways that the medication you know, didn't."

*On concern with long term use of antidepressant medication:*

"I can't really remember the last time I cried and before I did it a lot. I watched some really like sad movies lately and usually you know, I would cry over them, but it hasn't really affected me lately so that kinda...so that kinda worries me like if something bad really happens and what if I don't get affected and.. I don't think that's talked about enough, like, ya you're going to be happy but never know what its like to be sad again."

Text Example of Lived Time:*On planning to take antidepressants till less stress:*

"I don't really know because I kind of want to see how my next situation is, with these residencies they are kind of a tense...and we have to do a lot of presenting and a lot of things that will cause a lot of anxiety and I don't know if it would be good to decrease it at this time especially with the new change coming up and you know moving and starting the job and all these things. So I don't...I don't perceive it happening any time soon. It is kind of just you know when I feel stable enough with my life that I can decrease the medication and not worry about it. But I just don't feel... I perceive too many changes happening that I don't know if I would be able to handle it if I wasn't on the medication."

*On developing patience for antidepressant effect to take place:*

"I..... am surprised that the Effexor didn't work very well for me but..... I guess I have always known that with this kind of thing with antidepressants and SSRIs is a little bit of art and a little bit of science and ahm....maybe I understand a little bit better now that you can't expect it to be kind of a quantitative process that well you add this to this and this and then you are fine. It's sort of a tinkering and I guess I have had to think about it with a little bit more patience but not really I mean, I perceive my depression as being something that I may have to live with my whole life and I am ok with that and I think I can handle it so...."

Text Example of Lived Relation:*On describing experience with different physicians:*

"Like when I first went on Celexa it was like, 'Oh Ya, you have depression Here [reference of previous physician]. And so I didn't feel like he [refers to current physician] was pushing [the drug] on me, he was like you know what, are you sure you want to do that? Here are the different options. These are your side effects. Because of your history, you should try this one or you should try this one .I actually learned something about what I was going to be going on and I was able to ask questions. So, this was a lot more educational experience and I actually felt like he was there not just you know just checking his watch, like alright I have the next patient, so get out. That's what I felt like with the first time. So having that experience [current] where it seems they want to take the time and sit down with you and like figure out that this is something you need or just therapy is ok was really helpful, and like made me more ok with the decision I guess."

*On using friends as support system:*

"Ahm, I don't talk with my family about it.....just because you know, we don't see eye to eye on certain things and my reason for doing it may not be their reason and I just don't.... I just feel like it might bring up emotions and make me upset. I don't feel like they would add to my getting better. But I do have a couple friends that have known about this like when it started, so I talk to them about it just to keep them up-to-date. Cause that way like you know if I don't do something, I have someone to yell at me to be like, no do this, or like I am coming down to visit you to make sure that this happens and this doesn't happen . So it's really nice to have that support, you know outside of my providers."

Text Example of Lived Space:*On creating new space to be helpful to others:*

"No, I think that it's [antidepressant medication] almost like it's just a part of me now and I am not ashamed and I am not.....I have no problem... if one of my friends looks like they are having a hard time to give them advice or information about it. It's just kind of a part of me now and it doesn't have to be my whole life but right now I think that it is good for me to stay on it."

*On perceiving change in existing space:*

"I've been feeling really good. I did not have a hard time coming back [to University] which was really good, I was actually really excited to come back and start new classes and just be social with the people I have met. So ya, I had no problems coming back to Minneapolis. Ahm.....as far as school goes, I do still get stressed out about my grades and I always will. I don't expect it to go away. It's a healthy stress, its stress that makes me want to do well. But...ahm...relationships, personal relationships and stuff it's.....it's been pretty stable, I mean I just kind of take things with a grain of salt and whatever comes of it, will come of it. So I never used to think like that, I would really overanalyze things and sometimes I still do overanalyze things but for the most part ahm.....everything is really normal."



**Appendix IV: Text Example of The Essential Theme – Autonomy**

*On deciding to discontinue antidepressant due to distrust in provider:*

“Ahm....she [refers to physician]....at the time we talked about the drug and I said, what are the side effects and she said well you know you can get tired or you might get nervous. And I said specifically, does this drug cause weight gain? And she said no. And of course I am perfectly able to research things by myself and indeed Serzone does cause weight gain. So I lost trust in her with that and just stopped taking it [antidepressant] because I didn't want to gain weight and I didn't like that she lied to me so.....I really didn't like that she lied to me.”

*On describing importance of being the decision maker:*

“It's important for me because....then I get a level of respect for her [physician] that she trusts me and she knows that I know what I am talking about and we are working together instead of me just going in and having her tell me what to do. Then I just... since it's my body and my health care, I'd rather be the person making the decision with the physician. Even if it's the dentist or someone where I don't know much about, I rather still kind of make my own decisions and have them give me options just so...just because that's my health. And I know.....so I can weigh all my options instead of just having them tell me what to do and my doing it without thinking.”